## ABSTRACT

Compositions and methods that stimulate body protein synthesis and can improve muscle mass maintenance and recovery are provided. The composition comprises (i) a protein source which provides at least about 8% total calories of the composition and which includes at least about 50% by weight of whey protein; (ii) a lipid source having an omega 3:6 fatty acid ratio of about 5:1 to about 10:1 and which provides at least about 18% total calories of the composition; (iii) a carbohydrate source; and (iv) a balanced macronutrient profile comprising at least vitamin E and vitamin C.